WHAT IS CLAIMED IS:

A process for producing isopulegol represented
 by the following formula (1):

which comprises selectively cyclizing citronellal represented by the following formula (2):

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in the presence of a tris(2,6-diarylphenoxy)aluminum catalyst represented by the following general formula (3):

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$$AI \xrightarrow{Ar^1} R^1$$

$$Ar^2 R^3$$
(3)

wherein Al represents an aluminum atom, Ar^1 and Ar^2 each represent a substituted or unsubstituted aryl group or a

heteroaryl group; and R¹, R² and R³ each represent a hydrogen atom, a halogen atom, an alkyl group having 1 to 8 carbon atom(s), an alkoxy group having 1 to 8 carbon atom(s), a substituted or unsubstituted aryl group, a dialkylamino group wherein each alkyl group has 1 to 4 carbon atom(s), or a nitro group.

2. A process for producing optically active isopulegol represented by the following formula (4):

wherein * indicates an asymmetric carbon atom,
which comprises selectively cyclizing optically active
citronellal represented by the following formula (5):

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wherein * indicates an asymmetric carbon atom, in the presence of a tris(2,6-diarylphenoxy)aluminum catalyst represented by the following general formula (3): 10

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$$AI \longrightarrow Ar^{1} \longrightarrow R^{1}$$

$$Ar^{2} \longrightarrow R^{3}$$

$$Ar^{3} \longrightarrow R^{3}$$

wherein Al, Ar¹, Ar², R¹, R² and R³ are as defined above.

3. A process for producing isopulegol according to claim 1 or 2, wherein said tris(2,6-diarylphenoxy) aluminum catalyst is a reaction product obtained by reacting at least one compound selected from an alkylaluminum compound represented by the following general formula (6a):

$$(R^4)_{3-p}AlH_p$$
 (6a)

wherein Al represents an aluminum atom, R⁴ represents an alkyl group having 1 to 4 carbon atom(s), and p

15 represents an integer of 0 to 2,
and a metal aluminum hydride represented by the general formula (6b):

$$MAlH_4$$
 (6b)

wherein M represents a lithium atom, a sodium atom or a potassium atom, and Al represents an aluminum atom;

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and a 2,6-diarylphenol represented by the following general formula (7):

$$Ar^1$$
 R^1
 R^2
 R^3
 R^3

wherein ${\rm Ar}^1$, ${\rm Ar}^2$, ${\rm R}^1$, ${\rm R}^2$, and ${\rm R}^3$ are as defined above, in an inert solvent.